

Version with Markings to show
CHANGES MADE

USSN 09/766,253
Docket 015389-002921US
Geron No. 018/180c

Amended Title:

NOVEL TELOMERASE

METHOD FOR IDENTIFYING NUCLEOTIDE SEQUENCES ENCODING TELOMERASE PROTEIN

Amendments to Specification:

Page 14 lines 22-23:

Figure 1 (A) and (B) is a schematic diagram of the affinity purification of telomerase showing the binding step (Panel A) and the displacement elution steps step (Panel B).

Page 15 lines 3-4:

Figure 7 (A) and (B) ~~shows~~ show the putative alignments of telomerase RNA template with SEQ. ID NOs:43 and 44 in Panel A, and SEQ. ID NOs:45 and 46 in Panel B.

Page 17 line 2:

Figure 33 (A) is ~~a schematic an overall~~ summary of the *tez1*⁺ sequencing experiments. Figure 33 (B) is a "close-up" schematic of the same region of DNA.

Page 17 lines 10-11:

Figure 38 (A) and (B) shows the libraries (Panel A), the region used (Panel B), and the results of screening libraries for *S. pombe* telomerase sequence (Panels C and D).

Page 17 line 17:

Figure 42 (A) and (B) shows the alignment of three telomerase sequences. In Panel A, the shaded areas indicate residues shared between two sequences. In Panel B, the shaded areas indicate residues shared amongst all three sequences.

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Amendments to Claims:

8. A method for detecting the presence of polynucleotide sequences encoding at least a portion of telomerase in a biological sample, comprising the steps of:
- a) providing ~~+~~ i) a biological sample suspected of containing
a nucleic acid corresponding to the polynucleotide sequence of SEQ. ID NO:100;
ii) the nucleotide sequence of SEQ. ID NO:100, or a fragment thereof;
 - b) ~~combining said biological sample with said nucleotide under conditions such that a~~
hybridization complex is formed between said nucleic acid and said nucleotide; and
 - c) ~~detecting said hybridization complex~~
a polynucleotide encoding at least a portion of telomerase;
 - b) determining a nucleotide sequence contained in the polynucleotide;
 - c) comparing the sequence determined in step b) with telomerase motifs 0, 1, 2, and 3; and
then
 - d) deciding that the sample contains a polynucleotide sequence encoding at least a portion
of telomerase if the sequence determined in step b) contains motifs 0, 1, 2, and 3.

[claims 9-12 are canceled]

- 21. The method of claim 8, wherein the telomerase is a telomerase of a single-celled eukaryotic cell.
- 22. The method of claim 8, wherein the telomerase is a mammalian telomerase.
- 23. The method of claim 8, wherein the telomerase is a human telomerase.
- 24. The method of claim 8, wherein the telomerase contains SEQ. ID NO:100.